CLAIMS

What is claimed is:

1. A magnetic recording medium comprising:

a non-magnetic support and, in order thereon

a radiation-cured layer formed by curing a layer containing a radiation curing compound by exposure to radiation;

a middle layer having a non-magnetic powder dispersed in a binder (1), the middle layer being provided as necessary; and

at least one magnetic layer having a ferromagnetic powder dispersed in a binder (2);

the radiation curing compound having a hydroxyl group and a radiation curing functional group in the molecule; and

the magnetic layer having on the surface thereof a number of micro projections having a height of 10 to 20 nm measured by atomic force microscopy (AFM) of 5 to 1,000/100 $(\mu m)^2$.

2. The magnetic recording medium according to Claim 1, wherein the medium has at least one middle layer between the radiation-cured layer and the magnetic layer.

3. The magnetic recording medium according to Claim 1, wherein the radiation curing compound is a radiation curing compound (1) having 1 to 3 hydroxyl groups and 2 to 5 acryloyl groups or methacryloyl groups in the molecule.

4. The magnetic recording medium according to Claim 3, wherein the radiation curing compound comprises the radiation curing compound (1) and a radiation curing compound (2) having a cyclic structure, an ether group, and two or more radiation curing functional groups in the molecule.

5. The magnetic recording medium according to Claim 4, wherein the radiation curing compound (2) has an acryloyl group as a radiation curing functional

group.

6. The magnetic recording medium according to Claim 4, wherein the medium contains 10 wt % to 80 wt % of the radiation curing compound (2) relative to 100 wt % of the radiation curing compound (1).

7. The magnetic recording medium according to Claim 1, wherein the ferromagnetic powder is a ferromagnetic metal powder.

8. The magnetic recording medium according to Claim 1, wherein the ferromagnetic powder is a ferromagnetic hexagonal ferrite powder.

9. The magnetic recording medium according to Claim 1, wherein the binder (1) and/or the binder (2) comprise a polyurethane resin.

10. The magnetic recording medium according to Claim 1, wherein the radiation curing functional group is an acryloyl group and/or a methacryloyl group.

11. The magnetic recording medium according to Claim 1, wherein the radiation-cured layer and/or the middle layer contain carbon black.

12. The magnetic recording medium according to Claim 1, wherein the radiation-cured layer has a thickness of 0.1 to 1.0 μm.

13. The magnetic recording medium according to Claim 1, wherein the magnetic layer has a thickness of 0.05 to 1.0 μm.

14. The magnetic recording medium according to Claim 1, wherein the middle layer has a thickness of 1.0 to 2.0 μm.